
2. Characteristics of PFF Program

To set the context for examination of Fellow accomplishments, it is useful to understand the characteristics of both the postsecondary institutions and the young tenure-track faculty who benefited from the PFF program.

Participating Institutions

The potential scope of the PFF program was very wide. NSF sought nominations from all institutions in the United States that offered a baccalaureate, master's, or doctoral degree in fields supported by the Foundation. Institutions were allowed to submit two nominations per year. When nominating individuals, institutions were encouraged to be "sensitive to diversity issues and inclusive across departments and campuses."

Over the four years from 1992 through 1995, 338 institutions nominated faculty members for the PFF award. Almost two-fifths of these institutions only nominated one faculty member over the life of the program. The remaining colleges and universities nominated between two and eight faculty members over the life of the program. A small sample, 57 (17 percent), nominated two individuals in each of the years that PFF was active. Only 4 of the nominations came from institutions that were classified as historically black colleges or universities (HBCUs). Furthermore, 65 percent of the nominations during this period came from public institutions, with the remaining 35 percent coming from private institutions.

Table 2-1 shows the total number of institutions that nominated faculty for the program. Data in the table also show that nominations declined over time.

Table 2-1. — Number of nominating/awardee institutions: 1992-95

Institution	Award year				
	FY 1992	FY 1993	FY 1994	FY 1995	FY 1992-95
Nominating institutions	204	206	174	174	338
Awardee institutions	30	29	28	30	82

SOURCE: PFF program documentation.

By the end of the program, PFF grants had been awarded to 120 individuals at 82 institutions. While 67 percent of these universities and colleges received only one PFF award, 19 institutions (23 percent) received two awards: between 1992 and 1995, the University of California-Berkeley received four PFF awards; Johns Hopkins University, four awards; Georgia Institute of Technology, three awards; Purdue University, three awards; and University of Chicago, three awards.

Of the 120 awards, 62 percent were made to public institutions and 38 percent were awarded to private institutions (the balance between public and private institutions was similar for nominee and awardee institutions). One award went to an institution in Puerto Rico, while none went to an HBCU.

PFF Nominees and Awardees

As shown in Table 2-2, 80 percent of the 1,183 nominations were submitted to three NSF Directorates: Mathematical and Physical Sciences (28 percent), Engineering (27 percent), and Biological Sciences (25 percent).

Table 2-2. — PFF nominations, by Directorate: 1992-95

Directorate	Award cohort				
	FY 1992	FY 1993	FY 1994	FY 1995	FY 1992-95
Total number	323	314	272	274	1,183
Biological Sciences	22.8%	24.6%	25.5%	25.7%	24.6%
Computer Science and Engineering	10.2	11.2	8.1	9.5	9.8
Education and Human Resources	0.9	1.3	0.0	1.5	0.9
Engineering	29.9	27.2	26.3	25.7	27.4
Geosciences	4.3	4.5	4.8	3.7	4.3
Mathematical and Physical Sciences	28.4	27.5	28.9	26.8	27.9
Social, Behavioral and Economic Sciences	3.4	3.8	6.3	7.0	5.0

NOTE: Percents may not add to 100 because of rounding.

SOURCE: PFF program documentation.

Most (79 percent) of the nominees were male, although the percentage of female nominees increased slightly over the life of the program (Table 2-3). In addition:

- The vast majority of nominees (79 percent) were white, although the percentage of white nominees decreased over the life of the program. In addition, 14 percent were Asian, while blacks and Hispanics composed only 2 and 4 percent of nominees, respectively.
- Seventy-six percent were U.S. citizens. Most of the remaining nominees (23 percent) were permanent residents.¹⁰
- The two largest regional distributions of nominations were 31 percent received from colleges and universities in the northeast, and 28 percent from institutions in the west.

Table 2-3. — Characteristics of PFF nominees: 1992-95

Characteristic	Nominee cohort				
	FY 1992	FY 1993	FY 1994	FY 1995	FY 1992-95
Total	323	314	272	274	1,183
Male	260 (80.5%)	255 (81.2%)	217 (79.8%)	207 (75.5%)	939 (79.4%)
Female	61 (18.9%)	58 (18.5%)	55 (20.2%)	63 (23.0%)	237 (20.0%)
Not reported	2 (0.6%)	1 (0.3%)	0 (0.0%)	4 (1.5%)	7 (0.6%)
White	268 (83.0%)	256 (81.5%)	199 (73.2%)	212 (77.4%)	935 (79.0%)
Black or African American	7 (2.2%)	5 (1.6%)	8 (2.9%)	3 (1.1%)	23 (1.9%)
Hispanic or Latino	11 (3.4%)	9 (2.9%)	11 (4.0%)	12 (4.4%)	43 (3.6%)
Asian	35 (10.8%)	42 (13.4%)	52 (19.1%)	40 (14.5%)	169 (14.3%)
Pacific Islander	0 (0.0%)	0 (0.0%)	2 (0.7%)	0 (0.0%)	2 (0.2%)
American Indian/Alaska Native	0 (0.0%)	1 (0.3%)	0 (0.0%)	2 (0.7%)	3 (0.2%)
Not reported	2 (0.6%)	1 (0.3%)	0 (0.0%)	5 (1.8%)	8 (0.8%)
Underrepresented minority ¹	5.6%	4.8%	7.7%	6.3%	5.9%
Non-underrepresented minority ²	93.8%	94.9%	92.3%	91.9%	93.3%
Not reported	0.6%	0.3%	0.0%	1.8%	0.8%
U.S. citizen	262 (81.1%)	246 (78.3%)	197 (72.4%)	194 (70.8%)	899 (76.0%)
Permanent resident	56 (17.3%)	67 (21.3%)	73 (26.8%)	73 (26.6%)	269 (22.7%)
Temporary resident ³	2 (0.6%)	0 (0.0%)	2 (0.7%)	1 (0.4%)	5 (0.4%)
Not reported	3 (0.9%)	1 (0.3%)	0 (0.0%)	0 (2.2%)	4 (0.8%)

¹⁰ While grant recipients were required to be U.S. citizens or permanent residents, a few applicants may not have met this criteria or may have been residents of U.S. territories who, at this time, would not have been reported as U.S. citizens or permanent residents.

Table 2-3. — Characteristics of PFF nominees: 1992-95 (continued)

Characteristic	Nominee cohort				
	FY 1992	FY 1993	FY 1994	FY 1995	FY 1992-95
Total	323	314	272	274	1,183
Northeast	100 (30.9%)	86 (27.4%)	89 (32.7%)	92 (33.6%)	367 (31.0%)
Southeast	49 (15.2%)	62 (19.7%)	60 (22.1%)	49 (17.9%)	220 (18.6%)
Central	74 (22.9%)	69 (22.0%)	53 (19.5%)	61 (22.2%)	257 (21.7%)
West	99 (30.7%)	95 (30.3%)	70 (25.7%)	71 (25.9%)	335 (28.3%)
Territories	1 (0.3%)	2 (0.6%)	0 (0.0%)	1 (0.4%)	4 (0.3%)

¹Includes black or African American, Hispanic or Latino, Pacific Islander, American Indian, and Alaska Native.

²Includes white and Asian.

³While grant recipients were required to be U.S. citizens or permanent residents, a few applicants may not have met this criteria or may have been residents of U.S. territories who, at this time, would not have been reported as U.S. citizens or permanent residents.

NOTE: Percents may not add to 100 because of rounding.

SOURCE: EHR Impact Database and PFF program documentation.

It should be noted that in publicizing PFF, NSF mailed program announcements to HBCUs and other eligible institutions. Nonetheless, the relatively low percentage of females (20 percent) and underrepresented minorities (6 percent) who were nominated for PFF suggests that the program may have had difficulty finding or selecting candidates from these groups to nominate for PFF. Further, as discussed previously, only 4 of the 1,183 nominations came from HBCUs. Additionally, since disability status is self-reported, the program does not have complete data on participation of persons with disabilities.

The program annually supported a small number of highly selected young faculty. Approximately 10 percent of those nominated received an award. The actual number of awardees in any given year was 30. Of this number, 15 came from science-related NSF Directorates (i.e., Biology; Education and Human Resources; Geosciences; Social, Behavioral and Economic Sciences; and Mathematical and Physical Sciences) and 15 came from engineering-related NSF Directorates (i.e., Engineering and Computer Science and Engineering). As shown in Table 2-4, four NSF Directorates accounted for 90 percent of the awards: Engineering (37 percent), Mathematical and Physical Sciences (23 percent), Biological Sciences (17 percent), and Computer Science and Engineering (13 percent).

Table 2-4. — PFF awards, by Directorate: 1992-95

Directorate	Award cohort				
	FY 1992	FY 1993	FY 1994	FY 1995	FY 1992-95
Total number	30	30	30	30	120
Biological Sciences	16.7%	16.7%	16.7%	16.7%	16.7%
Computer Science and Engineering	13.3	13.3	13.3	13.3	13.3
Education and Human Resources	0.0	0.0	0.0	3.3	0.8
Engineering	40.0	33.3	36.7	36.7	36.7
Geosciences	3.3	6.7	3.3	3.3	4.2
Mathematical and Physical Sciences	23.3	23.3	23.3	20.0	22.5
Office of the Director	0.0	0.0	0.0	3.3	0.8
Social, Behavioral and Economic Sciences	3.3	6.7	6.7	3.3	5.0

NOTE: Percents may not add to 100 because of rounding.

SOURCE: PFF program documentation.

Seventy percent of awardees were male and 30 percent were female— although in the last year that PFF grants were made, females accounted for 43 percent of all awards (Table 2-5). In addition:

- Seventy-three percent of awardees were white and 17 percent were Asian. Blacks and Hispanics comprised only 4 and 5 percent of awardees, respectively. In 1992, however, 10 percent of the awardees were Hispanic and in FY 1994, 10 percent were black.
- Seventy-three percent were U.S. citizens. The percentage of awardees who were U.S. citizens declined over time (from 90 percent in FY 1992 to 63 percent in FY 1994). Most of the remaining awardees (26 percent) were permanent residents.
- Thirty-three percent were from colleges and universities in the northeastern United States, while 31 percent were from institutions in the west.
- The average PFF awardee was 34 years old at the time of his/her nomination.
- Twenty-three percent of PFF awardees were PYI or NYI recipients.

Table 2-5. — Characteristics of PFF awardees: 1992-95

Characteristic	Award cohort				
	FY 1992	FY 1993	FY 1994	FY 1995	FY 1992-95
Total	30	30	30	30	120
Male	23 (76.7%)	20 (66.7%)	24 (80.0%)	17 (56.7%)	84 (70.0%)
Female	7 (23.3%)	10 (33.3%)	6 (20.0%)	13 (43.3%)	36 (30.0%)
White	22 (73.3%)	23 (76.7%)	19 (63.3%)	23 (76.7%)	87 (72.5%)
Black or African American	0 (0.0%)	1 (3.3%)	3 (10.0%)	1 (3.3%)	5 (4.2%)
Hispanic or Latino	3 (10.0%)	1 (3.3%)	1 (3.3%)	1 (3.3%)	6 (5.0%)
Asian	5 (16.7%)	4 (13.3%)	7 (23.3%)	4 (13.3%)	20 (16.7%)
Pacific Islander	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
American Indian/Alaska Native	0 (0.0%)	1 (3.3%)	0 (0.0%)	1 (3.3%)	2 (1.7%)
Underrepresented minority ¹	10.0%	10.0%	13.3%	10.0%	10.8%
Non-underrepresented minority ²	90.0%	90.0%	86.7%	90.0%	89.2%
U.S. citizen	27 (90.0%)	22 (73.3%)	19 (63.3%)	20 (66.7%)	88 (73.3%)
Permanent resident	3 (10.0%)	8 (26.7%)	11 (36.7%)	9 (30.0%)	31 (25.8%)
Temporary resident ³	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (3.3%)	1 (0.8%)
Northeast	10 (33.3%)	7 (23.3%)	11 (36.7%)	12 (40.0%)	40 (33.3%)
Southeast	5 (16.7%)	5 (16.7%)	5 (16.7%)	3 (10.0%)	18 (15.0%)
Central	6 (20.0%)	8 (26.7%)	6 (20.0%)	4 (13.3%)	24 (20.0%)
West	8 (26.7%)	10 (33.3%)	8 (26.7%)	11 (36.7%)	37 (30.8)
Territories ³	1 (3.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.8%)
Average age at PFF nomination	33.3	33.8	33.9	35.4	34.4
Percent who were PYI/NYI recipients	16.7%	23.3%	23.3%	26.7%	22.5%

¹Includes black or African American, Hispanic or Latino, Pacific Islander, American Indian, and Alaska Native.

²Includes white and Asian.

³At this time, residents of U.S. territories, though eligible for the program, would not have been reported as U.S. citizens or permanent residents.

NOTE: Percents may not add to 100 because of rounding.

SOURCE: EHR Impact Database and PFF program documentation.

Table 2-6 shows the similarities and differences between nominees and awardees. Comparing nominees and awardees, we find that the review process resulted in slight increases in the proportion of females, Asians, and underrepresented minorities compared to the nominee population. Appendix A presents the names of the PFF Fellows, the institutions nominating them, and their disciplines.

Table 2-6. — Characteristics of PFF nominees and awardees: 1992-95

Characteristic		Percent (FY 1992-95)	
		Nominees (n=1,183)	Awardees (n=120)
NSF Directorate	Biological Sciences	24.6	16.7
	Computer Science and Engineering	9.8	13.3
	Education and Human Resources	0.9	0.8
	Engineering	27.4	36.7
	Geosciences	4.3	4.2
	Mathematical and Physical Sciences	27.9	22.5
	Office of the Director	0.0	0.8
	Social, Behavioral and Economic Sciences	5.0	5.0
Gender	Male	79.4	70.0
	Female	20.0	30.0
	Not reported	0.6	0.0
Race/ethnicity	White	79.0	72.5
	Black or African American	1.9	4.2
	Hispanic or Latino	3.6	5.0
	Asian	14.3	16.7
	Pacific Islander	0.2	0.0
	American Indian/Alaska Native	0.2	1.7
	Not reported	0.8	0.0
Minority status	Underrepresented minority ¹	5.9	10.8
	Non-underrepresented minority ²	93.3	89.2
	Not reported	0.8	0.0
Citizenship status	U.S. citizen	76.0	73.3
	Permanent resident	22.7	25.8
	Temporary resident ³	0.4	0.8
	Not reported	0.8	0.0
Region	Northeast	31.0	33.0
	Southeast	18.6	15.0
	Central	21.7	20.0
	West	28.3	30.8
	Territories ³	0.3	0.8

¹Includes black or African American, Hispanic or Latino, Pacific Islander, American Indian, and Alaska Native.

²Includes white and Asian.

³At this time, residents of U.S. territories would have been eligible for the program, though not reported as U.S. citizens or permanent residents.

NOTE: Percents may not add to 100 because of rounding.

SOURCE: EHR Impact Database and PFF program documentation.